

REMARKS

Claims 15-28 are pending in this application. By this Amendment, claims 15, 20, 21 and 26 are amended; and claims 1-14 are canceled without prejudice to or disclaimer of the subject matter therein. Support for the amendments to claims 15, 20, 21 and 26 can be found in the specification as originally filed, for example, at paragraphs [0020] and [0027]; and in original claims 15, 20, 21 and 26. No new matter is added by these amendments.

The courtesies extended to Applicant's representative by Examiner Chapman at the interview held October 27, 2005, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below and constitute Applicants' record of the interview.

I. Claim Rejections Under 35 U.S.C. §112

The Office Action rejects claims 6, 12 and 20 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out or distinctly claim the subject matter that Applicants regard as the invention. While Applicants do not necessarily agree with the rejections, claims 6 and 12 are canceled, and claim 20 is amended to more clearly set forth the subject matter therein. Accordingly, reconsideration and withdrawal of the rejections are respectfully requested.

II. Claim Rejection Under 35 U.S.C. §103

The Office Action rejects claims 1-28 under 35 U.S.C. §103(a) over U.S. Patent No. 5,122,429 to Sundararajan in view of U.S. Patent No. 5,863,686 to Yuh. Applicants respectfully traverse this rejection with respect to claims 15-28, claims 1-14 having been canceled herein.

Sundararajan discloses a photoconductive imaging member that includes a substrate, a hole-blocking layer, an optional adhesive layer, a photogenerating layer and a hole-transport layer. See Sundararajan, col. 6, lines 31-37. In particular, Sundararajan teaches

photogenerating layers that are between 0.05 and 10 microns thick and that contain polymer resins and compounds including dibromoanthanthrone. *See* Sundararajan, col. 9, lines 22-28; col. 10, lines 12-17; col. 12, lines 5-27. Yuh discloses electrophotographic imaging members, and in particular teaches imaging members in which dibromoanthanthrone is included in vinyl resin binders in charge generating layers. *See* Yuh, col. 3, lines 30-33; col. 7, lines 5-9. Based on these teachings, the Office Action asserts that claims 15-28 would have been obvious over Sundararajan and Yuh. Applicants respectfully disagree.

Independent claim 15 sets forth, in pertinent part, an "electrophotographic imaging member, comprising: a substrate; an undercoating layer; and a photoconductor layer; wherein the undercoating layer comprises a polymer resin and a charge erase enhancer and the undercoating layer is more than about 5 μm in thickness; and wherein the photoconductor layer comprises a charge generating layer and a charge transport layer." Claims 15-28 depend, directly or indirectly, from claim 15 and incorporate all of the limitations thereof.

The claimed electrophotographic imaging member comprises three distinct layers on a substrate: an undercoating layer and a photoconductor layer that includes a charge generating layer and a charge transport layer. In particular, the claimed undercoating layer includes a charge erase enhancer and a polymer resin. The claimed undercoating layer is more than 5 μm thick.

However, neither Sundararajan nor Yuh teach or suggest such an undercoating layer.

As discussed above, Sundararajan teaches a photoconductive imaging member including a substrate, a hole-blocking layer, an optional adhesive layer, a photogenerating layer and a hole-transport layer. *See* Sundararajan, col. 6, lines 31-37. Sundararajan discloses that dibromoanthanthrone may be included in the polymer resins of its 0.05 to 10 μm -thick photogenerating layers. *See* Sundararajan, col. 9, line 22 - col. 10, line 17. However, the

Sundararajan photogenerating layers are charge generating layers, and correspond to the charge generating layer in the photoconductive layer of the claimed imaging member.

Sundararajan does not teach or suggest including dibromoanthanthrone or other charge erase enhancers, such as photoconductive particles, in layers other than its photogenerating or charge generating layer. *See generally* Sundararajan.

Because Sundararajan only teaches including photoconductive particles or charge erase enhancers in its photogenerating layer, Sundararajan does not teach or suggest an electrophotographic imaging member that includes an undercoating layer that "comprises a polymer resin and a charge erase enhancer and the undercoating layer is more than about 5 μ m in thickness," as set forth in claim 15. Thus, Sundararajan alone cannot support a rejection of independent claim 15 and its dependent claims. Yuh does not remedy the shortcomings of Sundararajan.

Yuh teaches electrophotographic imaging members that include a supporting substrate, an undercoat layer, a charge generating layer, and a charge transport layer. *See* Yuh, col. 3, lines 25-65. In the Yuh imaging members, dibromoanthanthrone is included in the charge generating layer. *See* Yuh, col. 7, lines 5-9. Like Sundararajan, Yuh does not disclose or suggest including dibromoanthanthrone or other charge erase enhancers, such as photoconductive particles, in layers other than its charge generating layer. *See generally* Yuh.

Although Yuh appears to disclose including a donor molecule in its undercoat layer (*see* Yuh, Abstract), Yuh teaches that donor molecules may be included in its charge generating layer to improve the sensitivity and dispersibility of benzimidazole perylene or dibromoanthanthrone. *See* Yuh, col. 7, lines 28-38. In addition, Yuh teaches that such donor molecules should be insoluble in the solvent and binder resin of its undercoat layer, that the undercoat layer's solvent and binder resin should also be insoluble in the solvent used for

forming the charge generating layer, and that the binder resins of the undercoat and charge generating layers should be immiscible. *See* Yuh, col. 8, lines 15-25. Thus, Yuh teaches that donor molecules should not be included in its undercoat.

Because Yuh only teaches including photoconductive particles or charge erase enhancers in its photogenerating layer, Yuh does not teach or suggest an electrophotographic imaging member that includes an undercoating layer that "comprises a polymer resin and a charge erase enhancer and the undercoating layer is more than about 5 μ m in thickness," as set forth in claim 15. Thus, Yuh alone cannot support a rejection of independent claim 15 and its dependent claims.

Because neither Sundararajan nor Yuh teaches or suggests an electrophotographic imaging member that includes an undercoating layer that "comprises a polymer resin and a charge erase enhancer and the undercoating layer is more than about 5 μ m in thickness," as set forth in claim 15, independent claim 15 and its dependent claims 16-28 are patentable over the combination of Sundararajan and Yuh.

Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-28 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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